

Katcha et al.

S/N: 10/604,192

**REMARKS**

Claims 1-24 are pending in the present application. In the Office Action mailed December 1, 2004, the Examiner rejected claim 19 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner next rejected claims 1-4, 8-10, 18, and 21-24 under 35 U.S.C. §102(b) as being anticipated by Steigerwald et al. (USP 5,608,771). Claims 11-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Steigerwald et al.

The drawings were objected to by the Examiner as were claims 3-7. Applicant appreciates the Examiner's indication that claims 5-7, 15-17, and 22 are allowable.

Per the Examiner's direction, paragraph [0025] has been amended. Additionally, paragraph [0031] has also been amended to correct a typographical error. No new matter has been added.

Regarding the Examiner's objections to the drawings, Applicant believes the objections to be moot in light of the amendments made to claims 19 and 22. Corrected drawings are not believed necessary.

Claims 3-7 have also been amended to correct the informalities identified by the Examiner. It is believed that claims 3-7, as amended, comport with the statutory provisions of Title 35 of the U.S. Code.

The Examiner rejected claim 19 under 35 U.S.C. §112, second paragraph. Applicant has amended claim 19 such that the transformer is not claimed as being included in the inverter. Accordingly, it is believed that claim 19 satisfies the requirements of 35 U.S.C. §112.

Claims 1-4, 8-10, 18, and 21-24 stand rejected as being anticipated by Steigerwald et al. As is well-known, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Therefore, to sustain a rejection under 35 U.S.C. §102, the reference relied upon by the Examiner must teach or disclose each and every element of claims 1-4, 8-10, 18, and 21-24; which it does not.

Steigerwald et al. discloses a contactless power transformer system for a rotational load wherein "a resonant inverter provides ac power to [a] rotary transformer which, in turn, drives a high-voltage tank circuit coupled to a x-ray tube, the tank circuit and x-ray tube being mounted on a rotational gantry." Steigerwald et al., USP 5,608,771, Abstract. Steigerwald et al. asserts that its construction advantageously "eliminates conventional brush and slip ring

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arrangements..." *Id.* The reference further states that by using a rotary transformer instead of a slip ring, noise emissions are less when compared to that generated by AC current passing through slip rings of conventional systems. See Steigerwald et al., supra at col. 3, ll. 40-47. Moreover, Steigerwald et al. states that a CT system incorporating a rotary transformer has the additional advantage of having the inverter stationary rather than mounted to rotate with the CT gantry as is customary for conventional CT system designs. In short, the reference relied upon by the Examiner teaches a construction that includes a rotary transformer rather than a slip ring and, moreover, Steigerwald et al. clearly sets forth that a rotary transformer is not equivalent to a slip ring. That is, a slip ring has drawbacks asserted by Steigerwald et al. that are not encountered and overcome by a rotary transformer.

In contrast, claims 1-4, 8-10, 18, and 21-24 call for a slip ring. As acknowledged by Steigerwald et al., a slip ring and a rotary transformer are not equivalent nor would one skilled in the art consider the rotary transformer disclosed by the reference as being tantamount to a slip ring. Not only are a slip ring and rotary transformer not interchangeable, but the disclosed rotary transformer is brushless or contactless whereas a slip ring is not. Moreover, there is nothing in the reference to suggest that a slip ring could be used in place of a rotary transformer. Accordingly, Steigerwald et al. fails to disclose each and every element called for in claims 1-4, 8-10, 18, and 21-24.

Specifically, Steigerwald et al. fails to disclose an x-ray generator for a CT scanner having a slip ring to transfer power to a rotating high voltage tank, a rotatable x-ray tube operationally connected to the slip ring to receive power from the HV tank and project x-rays toward a subject to be scanned, and a stationary inverter to provide AC power to the slip ring for transference to the HV tank. Similarly, the reference also fails to teach a CT imager that includes a rotatable gantry having an imaging bore disposed therethrough, a stationary base supporting the gantry, a slip ring disposed in the rotatable gantry and electrically connected to an x-ray tube and a high voltage tank, and a power conditioner external to the gantry to receive a DC voltage and generate an AC voltage waveform that is applied to the high voltage tank through the slip ring. Further, Steigerwald et al. fails to disclose a CT scanner having a rotatable x-ray tube and a rotatable high voltage tank, a slip ring to transfer current to the high voltage tank, and a stationary base having an inverter to supply AC power to the slip ring for transference to the high voltage tank, wherein the inverter has at least one resonant circuit connected to the slip ring.

Regarding the rejection of claims 11-14 under 35 U.S.C. §103(a), Applicant respectfully disagrees with the Examiner with respect to the art as applied, but in light of each of the

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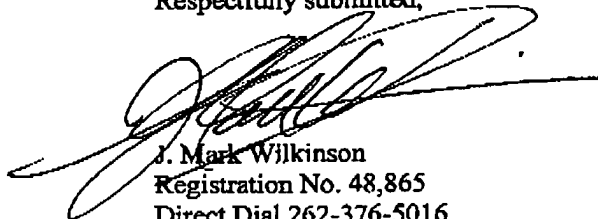
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aforementioned claims depending from what is believed an otherwise allowable claim, Applicant does not believe additional remarks are necessary and therefore requests allowance of claims 11-14 based on the chain of dependency.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-24.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,



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